ABSTRACT

[1078]   Soft metrics for multiple bursts transmitted at different times for a data packet are scaled, quantized, and rescaled prior to decoding. As each burst is received, input soft metrics for the burst are scaled with a scaling factor $S(i)$, quantized based on a quantization scale factor $Q(i)$, and stored in a buffer. The scaling factor and quantization scale factor are computed based on the statistics for the burst. After all bursts for the data packet have been received, the quantized soft metrics for each burst are rescaled based on the quantization scale factor $Q(i)$ for that burst and a common scale factor to properly weight the soft metrics in the decoding process. The common scale factor is determined based on the quantization scale factors $Q(i)$ for all bursts. The rescaled soft metrics for all bursts are requantized, deinterleaved, and decoded to obtain decoded data for the packet.